AMENDMENT TO THE CLAIMS

This Listing of Claims will replace all prior versions and listings of claims in the Application.

Listing of Claims:

Claim 1 (Currently amended): A testing method of array configuration for a multiple disk-array system ~~containing at least one disk array, each array having at least one disk drive with an array configuration, said array configuration comprising array quantity of disk drives, a disk sequence/function and serial check sum of every disk drive in one disk array~~, said testing method comprising steps of:

providing an interface operable to access a plurality of disk-arrays coupled thereto, where data is distributed across each disk-array of said plurality of disk-arrays independently of said distribution across other disk-arrays of said plurality of disk-arrays;

providing each disk drive of a corresponding disk-array of said plurality of disk-arrays with an array configuration structure, said array configuration structure including an indication of a number of disk drives in said corresponding disk-array and a serial check sum of each disk drive in said corresponding disk-array, said serial check sum of each said disk drive being arranged in said array configuration structure in accordance with a position and function of said disk drive in said corresponding disk-array;

reading said array configuration structure;

acquiring ~~a quantity~~ said indication of said number of disk drives from said array configuration structure and computing therefrom a corresponding number of disk drives;

reading every said serial check sum in said array configuration structure ~~of all disk drives from one array~~; and

comparing said ~~quantity~~ number of disk drives computed in said indication acquiring step with ~~another quantity~~ a number of disk drives ~~deduced~~ determined from said serial check sum reading step ~~of each disk drive in one array~~.

Claim 2 (Cancelled).

Claim 3 (Currently amended): The testing method as in claim 1 ~~2~~, further comprising steps of:

providing said array configuration structure with a disk sequence/function record for a corresponding disk drive;

acquiring ~~a~~ said disk sequence/function record ~~in~~ from said array configuration structure; and

comparing said disk sequence/function record with ~~another~~ a disk sequence/function ~~deduced~~ determined from said serial check sum reading step ~~sums of said disk drives in one disk array~~.

Claim 4 (Currently amended): The testing method as in claim 1, wherein said serial check sum of each said disk drive is obtained according to a numeration on a model number, a serial number, and a firmware revision number of said disk drive.

Claim 5 (Currently amended): The testing method as in claim 1, wherein said array configuration structure further comprises an array type~~, which is relevant to~~ indicative of a recording method of ~~said quantity~~ a corresponding number of disk drives, said array configuration structure further including a quantity field corresponding to said recording method and indicative of said corresponding number of disk drives.

Claim 6 (Currently amended): The testing method as in claim 5, wherein ~~said quantity~~ a number of disk drives ~~in a specific array~~ is determined by:

reading ~~an~~ said array type;

reading said ~~an array type related~~ quantity field ~~of disk drives record~~; and

computing ~~numerating a quantity~~ said number of disk drives ~~in~~ from said quantity field associated with said array type.

Claim 7 (Currently amended): The testing method as in claim 3, wherein said array configuration structure further comprises an array type~~, which is relevant to~~ indicative of a recording method of said disk sequence/function.

Claim 8 (Currently amended): The testing method as in claim 7, wherein said disk sequence/function ~~in a specific array~~ is determined by:

reading ~~an~~ said array type;

reading ~~an array type related by~~ said disk sequence/function record; and

calculating a disk sequence/function for each disk drive in accordance with said array type.

Claim 9 (Currently amended): A testing method of array configuration for a multiple disk-array system ~~containing at least one disk array, each array having at least one disk drive with an array configuration, said array configuration comprising array quantity of disk drives, a disk sequence/function and serial check sum of every disk drive in one disk array, said serial check sums of said disk drives in one disk array being arranged in an order according to a sequence and a function of said disk drives~~, said testing method comprising steps of:

providing an interface operable to access a plurality of disk-arrays coupled thereto, where data is distributed across each disk-array of said plurality of disk-arrays independently of said distribution across other disk-arrays of said plurality of disk-arrays;

providing each disk drive of a corresponding disk-array of said plurality of disk-arrays with an array configuration structure, said array configuration structure

including an indication of a number of disk drives in said corresponding disk-array, a disk sequence/function record, and a serial check sum of each disk drive in said corresponding disk-array, said serial check sum of each said disk drive being arranged in said array configuration structure in accordance with a position and function of said disk drive in said corresponding disk-array;

reading said array configuration structure;

acquiring said disk sequence/function record ~~of said array~~ from said array configuration structure;

reading every said serial check sum ~~of all disk drives from~~ in said array configuration structure; and

comparing said disk sequence/function record with ~~another~~ a disk sequence/function ~~deduced~~ determined from said serial check sum reading step ~~of each disk drive in one array~~.

Claim 10 (Currently amended): The testing method as in claim 9, further comprising steps of:

acquiring ~~a quantity~~ said indication of said number of disk drives from said array configuration structure and computing therefrom a corresponding number of disk drives; and

comparing said ~~quantity~~ number of disk drives with ~~another quantity~~ a number of disk drives ~~deduced~~ determined from said serial check sum reading step ~~of each disk drive in said array~~.

Claim 11 (Currently amended): The testing method as in claim 9, wherein said serial check sum of each said disk drive is obtained according to a numeration on a model number, a serial number, and a firmware revision number of said disk drive.

Claim 12 (Currently amended): The testing method as in claim 9, wherein said array configuration structure further comprises an array type~~, which is relevant to~~ indicative of a recording method of said disk sequence/function.

Claim 13 (Currently amended): The testing method as in claim 12, wherein said disk sequence/function in a specific array is determined by:

reading ~~an~~ said array type;

reading ~~an array type related by~~ said disk sequence/function record; and

calculating a disk sequence/function ~~for each disk drive~~ in accordance with said array type.

Claim 14 (Currently amended): The testing method as in claim 9, wherein said array configuration structure further comprises an array type~~, which is relevant to~~ indicative of a recording method of ~~said quantity~~ a corresponding number of disk drives, said array configuration structure further including a quantity field indicative of said corresponding number of disk drives.

Claim 15 (Currently amended): The testing method as in claim 14, wherein said recording method of said quantity of disk drives comprises steps of:

reading ~~an~~ said array type;

reading ~~an array type related by~~ said quantity field ~~of disk drives record~~;

and

computing ~~numerating a quantity~~ said number of disk drives ~~in~~ from said quantity field associated with said array type.